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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/168,585 10/08/98 DAVIS

F 0001-001(B)

EXAMINER

MM92/0314

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SHAFFER, R

ART UNIT

PAPER NUMBER

2872

DATE MAILED:

03/14/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/168,585

Applicant(s)

DAVIS ET AL

Examiner

R.D. SHAFER

Group Art Unit

2872

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 month MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 10/8/98
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 80-82 AND 87-91 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☒ Claim(s) 80-82 AND 87-91 are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

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1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 80,81,82,87 and 88, drawn to an apparatus for converting image data into a hologram comprising means for inputting image data for each pixel representing said image, a laser source configured to generate a beam with a coherence length, an optical system arranged to split and direct a laser beam into a reference beam and at least one object beam along pathways having a length within the range of said coherence length, means for moving a photosensitive surface with respect to said laser beam, and a controller having means for controlling the radiation of said photosensitive surface, classified in class 359, subclass 10.
  - II. Claims 89-91, drawn to a device for converting image data into a holographic pattern formed from a plurality of discrete holograms comprising means for converting said image data into digital form having a plurality of digital data characteristics, means for manipulating a laser beam according to said digital data characteristics by splitting said laser beam into a reference beam and at least one object beam and means for irradiating a photosensitive surface with said reference beam and said at least one object beam to sequentially form each of said holograms wherein each hologram has a distinct interference pattern and said interference pattern of each holographic pixel having characteristics of a corresponding discrete portion of said image data, classified in class 359, subclass 22.

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2. The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as an apparatus without a plurality of discrete holograms, means for converting image data into digital form having a plurality of digital characteristics, means for manipulating a laser beam according to said digital data characteristics...etc of group II and invention II has separate utility such as a device without an optical system arranged to split and direct a laser beam into a reference beam and at least one object beam along pathways having a length within the range of coherence length of a laser source, means for moving a photosensitive surface, a controller...etc. of group I. See MPEP § 806.05(d).

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any

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amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(I).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to R.D. Shafer whose telephone number is (703) 308-4813.

RDS

March 10, 2000

*Rick D. Shafer*  
RICK D. SHAFER  
PATENT EXAMINER  
ART UNIT 2872